January 2002



Raccoon Island Shoreline Protection/ Marsh Creation (TE-48)

Project Status

Approved Date: 2002 Cost: \$10.4 million
Project Area: 327 acres Status: Engineering
Net Benefit After 20 Years: 167 acres and Design
Project Type: Shoreline Protection and Marsh Creation

Location

The project is located in the Terrebonne Basin on the western-most island of the Isles Dernieres barrier island chain in Terrebonne Parish, Louisiana.

Problems

The Isle Dernieres barrier island chain is experiencing some of the highest erosion rates of any coastal region in the world. Raccoon Island is experiencing shoreline retreat both gulfward and bayward, threatening one of the most productive wading bird nesting areas and shorebird habitats along the gulf coast.

Restoration Strategy

An existing demonstration project on the eastern end of the island has proven that segmented breakwaters can significantly reduce, and perhaps even reverse, shoreline erosion rates. The primary goal of this project is to protect the Raccoon Island rookery and seabird colonies from the encroaching shoreline by: 1) reducing the rate of shoreline erosion along the western, gulfward side and 2) extending the longevity of northern backbay areas by creating 60 acres of intertidal wetlands that will serve as bird habitat.

This project includes: the construction of 8 additional segmented breakwaters along the gulf side of the island just west of the Raccoon Island Breakwaters

Demonstration project; closing existing gaps between breakwaters 0, 1, and 2 with rock riprap; and the construction of an earthen dike along the northern shore to create a back bay enclosure that will be filled with sediments dredged from the bay, followed by vegetative plantings. The proposed features are not anticipated to require maintenance.



Rock breakwater construction for the prior demonstration phase of this project was completed on the east end of the island in June 1997. Taken immediately after construction was complete, this 1997 photograph shows no sand behind the breakwaters



Sand deposits or "tombolos" have developed behind the breakwaters that protect and enhance the island. A similar effect is expected to occur behind the 8 additional breakwaters being constructed to the west of the existing project.

Progress to Date

This project was selected for Phase I (engineering and design) funding at the January 2002 Breaux Act Task Force meeting. It is included as part of Priority Project List 11.

For more project information, please contact:



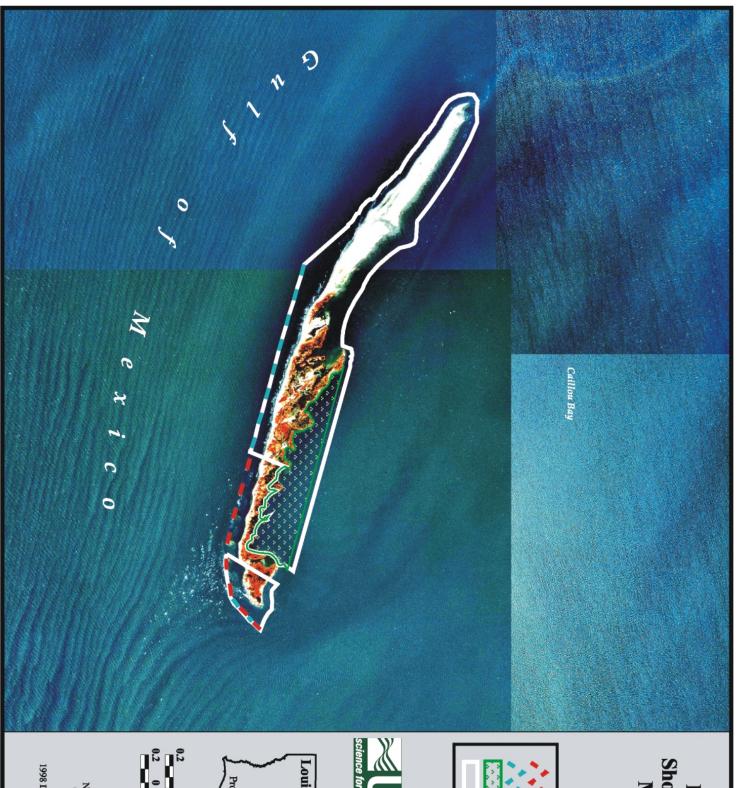
Federal Sponsor:

Natural Resources Conservation Service Alexandria, LA (318) 473-7816



Local Sponsor:

Louisiana Department of Natural Resources Baton Rouge, LA (225) 342-7308



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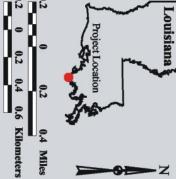


Project Boundary

Marsh Creation Proposed Breakwater Existing Breakwater







Map Produced By:
U.S. Department of the Interior
U.S. Geological Survey
National Wetlands Research Center
Coastal Restoration Field Station

Background Imagery: 1998 Digital Orthophoto Quarter Quadrangles

Map Date: March 10, 2002 Map ID: 2002-11-221